



PATENT  
Attorney Docket No. MDS-020

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Costa et al.  
SERIAL NO.: 09/738,612 GROUP NO.: 2633  
FILING DATE: December 15, 2000 EXAMINER: Not yet assigned  
TITLE: System for Normalizing Spectra

Assistant Commissioner for Patents  
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the provisions of 37 C.F.R. 1.97 and 1.98, Applicants hereby make of record the patents and publications listed on the accompanying Form PTO-1449, and other information contained herein, for consideration by the Examiner in connection with the examination of the above-identified patent application. Copies of the patents and publications are enclosed.

RECEIVED  
JUL 24 2003  
TC 2800 MAIL ROOM

REMARKS

In accordance with the provisions of 37 C.F.R. 1.97, this statement is being filed (CHECK ONE):

- ☒ (1) within three (3) months of the **filing date** of a national application other than a continued prosecution application under 37 C.F.R. 1.53(d), or within three (3) months of the **date of entry of the national stage** as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing of the **first Office action** on the merits, or before the mailing of a **first Office action** after the filing of a request for continued examination under 37 C.F.R. 1.114; or
- ☐ (2) after the period defined in (1) but before the mailing date of a **final action** or a **notice of allowance** under 37 C.F.R. 1.311, and
- ☐ the requisite Statement is below, **OR**
- ☐ the requisite fee under 37 C.F.R. 1.17(p), namely **\$180.00**, is included herein, or
- ☐ (3) after the mailing date of a **final action** or **notice of allowance** but before the payment of the **issue fee**, **AND**

- ☐ the requisite Statement is below, **AND**
- ☐ the requisite petition fee under 37 C.F.R. 1.17(p), namely **\$180.00** is included herein.

It is respectfully requested that each of the patents and publications listed on the attached Form PTO-1449, and other information contained herein, be made of record in this application.

### STATEMENT

As required under 37 C.F.R. 1.97(e), Applicant(s), through the undersigned, hereby state either that [check the appropriate space only if either (2) or (3) is checked on the previous page and the Statement is required]:

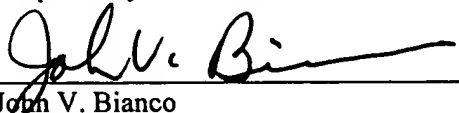
- ☐ 1. Each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application **not more than three months** prior to the filing of the Information Disclosure Statement; or
- ☐ 2. No item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this Statement after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to **any individual** designated in 37 C.F.R. 1.56(c) **more than three months** prior to the filing of the Information Disclosure Statement.

Date: October 04, 2001  
Reg. No. 36,748

Tel. No.: (617) 248-7870  
Fax No.: (617) 248-7100

2191187

Respectfully submitted,

  
John V. Bianco

Attorney for Applicants  
Testa, Hurwitz, & Thibault, LLP  
High Street Tower  
125 High Street  
Boston, Massachusetts 02110

ITC 2800 MAIL ROOM

JUL 24 2003

RECEIVED



FORM PTO - 1449

## INFORMATION DISCLOSURE STATEMENT

ATTORNEY DOCKET NO.: MDS-020

APPLICANT(S): Costa et al.

SERIAL NO.: 09/738,612

FILING DATE: December 15, 2000 GROUP: 2633

## U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A1	3,013,467	12/19/61	Minsky	88	14	
	A2	3,809,072	5/7/74	Ersek et al.	128	23	
	A3	4,017,192	4/12/77	Rosenthal et al	356	201	
	A4	4,198,571	4/15/80	Sheppard	250	571	
	A5	4,254,421	3/3/81	Kreutel, Jr.	343	754	
	A6	4,357,075	11/2/82	Hunter	350	294	
	A7	4,397,557	8/9/83	Herwig et al.	356	342	
	A8	4,662,360	5/5/87	O'Hara et al.	128	9	
	A9	4,733,063	3/22/88	Kimura et al.	250	201	
	A10	4,741,326	5/3/88	Sidall et al.	128	4	
	A11	4,753,530	6/28/88	Knight et al.	356	73	
	A12	4,768,513	9/6/88	Suzuki	128	634	
	A13	4,844,617	7/4/89	Kelderman et al.	356	372	
	A14	4,845,352	7/4/89	Benschop	250	201	
	A15	4,852,955	8/1/89	Doyle et al.	350	1.2	
	A16	4,877,033	10/31/89	Seitz, jr.	128	660.05	
	A17	4,878,485	11/07/89	Adair	128	6	
	A18	4,891,829	1/2/90	Deckman et al.	378	4	
	A19	4,930,516	6/5/90	Alfano et al.	128	665	
	A20	4,945,478	7/31/90	Merickel et al.	364	413.22	
	A21	4,965,441	10/23/90	Picard	250	201.3	
	A22	4,972,258	11/20/90	Wolf et al.	358	93	
	A23	4,974,580	12/04/90	Anapliotis	128	4	
	A24	4,979,498	12/25/90	Oneda et al.	128	6	
	A25	4,997,242	3/5/91	Amos	350	6.91	
	A26	5,003,979	4/2/91	Merickel et al.	364	413.22	
	A27	5,011,243	4/30/91	Doyle et al.	350	1.2	

EXAMINER

DATE CONSIDERED

RECEIVED  
JUL 24 2003  
TC 2800 MAIL ROOM

FORM PTO - 1449

INFORMATION DISCLOSURE STATEMENT

ATTORNEY DOCKET NO.: MDS-020

APPLICANT(S): Costa et al.

SERIAL NO.: 09/738,612

FILING DATE: December 15, 2000

GROUP: 2633

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A28	5,022,757	6/11/91	Modell	356	318	
	A29	5,028,802	7/2/91	Webb et al.	250	571	
	A30	5,032,720	7/16/91	White	250	236	
	A31	5,034,613	7/23/91	Denk et al.	250	458.1	
	A32	5,036,853	8/6/91	Jeffcoat et al.	128	634	
	A33	5,042,494	8/27/91	Alfano	128	665	
	A34	5,054,926	10/8/91	Dabbs et al.	356	345	
	A35	5,065,008	11/12/91	Hakamata et al.	250	216	
	A36	5,071,246	12/10/91	Blaha et al	351	221	
	A37	5,074,306	12/24/91	Green et al.	128	664	
	A38	5,083,220	1/21/92	Hill	359	234	
	A39	5,091,652	2/25/92	Mathies et al.	250	458.1	
	A40	5,120,953	6/9/92	Harris	250	227.20	
	A41	5,122,653	6/16/92	Ohki	250	216	
	A42	5,132,526	7/21/92	Iwasaki	250	201.3	
	A43	5,139,025	8/18/92	Lewis et al.	128	665	
	A44	5,154,166	10/13/92	Chikama	128	4	
	A45	5,159,919	11/03/92	Chikama	128	4	
	A46	5,161,053	11/3/92	Dabbs	359	384	
	A47	5,162,641	11/10/92	Fountain	250	201.2	
	A48	5,162,941	11/10/92	Favro et al.	359	386	
	A49	5,168,157	12/1/92	Kimura	250	234	
	A50	5,192,980	3/9/93	Dixon et al.	356	326	
	A51	Re. 34,214	4/6/93	Carlsson et al.	358	93	
	A52	5,201,318	4/13/93	Rava et al.	128	665	
	A53	5,201,908	4/13/93	Jones	128	4	
	A54	5,225,671	7/6/93	Fukuyama	250	216	
	A55	5,235,457	8/10/93	Lichtman et al.	359	368	

EXAMINER

DATE CONSIDERED



FORM PTO - 1449

## INFORMATION DISCLOSURE STATEMENT

ATTORNEY DOCKET NO.: MDS-020

APPLICANT(S): Costa et al.

SERIAL NO.: 09/738,612

FILING DATE: December 15, 2000

GROUP: 2633

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A56	5,237,984	8/24/93	Williams, III et al.	128	4	
	A57	5,239,178	8/24/93	Derndinger et al.	250	234	
	A58	5,248,876	9/28/93	Kerstens et al.	250	561	
	A59	5,257,617	11/2/93	Takahashi	128	4	
	A60	5,260,569	11/9/93	Kimura	250	234	
	A61	5,260,578	11/9/93	Bliton et al.	250	461.1	
	A62	5,261,410	11/16/93	Alfano et al.	128	664	
	A63	5,262,646	11/16/93	Booker et al.	250	341	
	A64	5,274,240	12/28/93	Mathies et al.	250	458.1	
	A65	5,284,149	2/8/94	Dhadwal et al.	128	665	
	A66	5,286,964	2/15/94	Fountain	250	201.2	
	A67	5,294,799	3/15/94	Aslund et al.	250	458.1	
	A68	5,296,700	3/22/94	Kumagai	250	216	
	A69	5,303,026	4/12/94	Strobl et al.	356	318	
	A70	5,306,902	4/26/94	Goodman	250	201.3	
	A71	5,313,567	5/17/94	Civanlar et al	395	124	
	A72	5,319,200	6/7/94	Rosenthal et al.	250	341	
	A73	5,321,501	6/14/94	Swanson et al.	356	345	
	A74	5,324,979	6/28/94	Rosenthal	250	504R	
	A75	5,325,846	7/5/94	Szabo	128	4	
	A76	5,329,352	7/12/94	Jacobsen	356	301	
	A77	5,337,734	8/16/94	Saab	128	4	
	A78	5,343,038	8/30/94	Nishiwaki et al.	250	234	
	A79	5,345,306	9/6/94	Ichimura et al.	356	346	
	A80	5,398,685	3/21/95	Wilk et al.	128	653.1	
	A81	5,402,768	4/4/95	Adair	128	4	
	A82	5,406,939	4/18/95	Bala	128	4	
	A83	5,413,092	5/9/95	Williams, III et al.	128	4	

RECEIVED  
JUL 24 2003  
TC 2800 MAIL ROOM

EXAMINER

DATE CONSIDERED



<p><b>FORM PTO - 1449</b></p> <p><b>INFORMATION DISCLOSURE STATEMENT</b></p>	<p><b>ATTORNEY DOCKET NO.:</b> MDS-020</p> <p><b>APPLICANT(S):</b> Costa et al.</p> <p><b>SERIAL NO.:</b> 09/738,612</p> <p><b>FILING DATE:</b> December 15, 2000      <b>GROUP:</b> 2633</p>
--	---

EXAM. INIT.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A84	5,413,108	5/9/95	Alfano	128	665
	A85	5,415,157	5/16/95	Welcome	128	4
	A86	5,418,797	5/23/95	Bashkansky et al.	372	3
	A87	5,419,311	5/30/95	Yabe et al.	128	4
	A88	5,421,337	6/6/95	Richards-Kortum et al.	128	665
	A89	5,421,339	6/6/95	Ramanujam et al.	128	665
	A90	5,451,931	9/19/95	Muller et al.	340	630
	A91	5,458,132	10/17/95	Yabe et al.	128	4
	A92	5,458,133	10/17/95	Yabe et al.	600	121
	A93	5,477,382	12/19/95	Pernick	359	559
	A94	5,480,775	1/2/96	Ito et al.	435	7.2
	A95	5,493,444	2/20/96	Khoury et al.	359	559
	A96	5,507,295	4/16/96	Skidmore	600	121
	A97	5,516,010	5/14/96	O'Hara et al.	600	122
	A98	5,529,235	6/25/96	Bolarski et al.	227	175.1
	A99	5,536,236	7/16/96	Yabe et al.	600	125
	A100	5,545,121	8/13/96	Yabe et al.	600	121
	A101	5,551,945	9/3/96	Yabe et al.	600	122
	A102	5,556,367	9/17/96	Yabe et al.	600	124
	A103	5,587,832	12/24/96	Krause	359	385
	A104	5,596,992	1/28/97	Haaland et al.	128	664
	A105	5,609,560	3/11/97	Ichikawa et al.	600	101
	A106	5,623,932	4/29/97	Ramanujam et al.	128	665
	A107	5,662,588	9/2/97	Lida	600	121
	A108	5,685,822	11/11/97	Harhen	600	125
	A109	5,693,043	12/2/97	Kittrell et al.	606	15
	A110	5,695,448	12/9/97	Kimura et al.	600	121
	A111	5,704,892	1/6/98	Adair	600	121

RECEIVED  
 JUL 24 2003  
 C 6800 MAIL ROOM

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
-----------------	------------------------



FORM PTO - 1449

## INFORMATION DISCLOSURE STATEMENT

ATTORNEY DOCKET NO.: MDS-020

APPLICANT(S): Costa et al.

SERIAL NO.: 09/738,612

FILING DATE: December 15, 2000

GROUP: 2633

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A112	5,707,343	1/13/98	O'Hara et al.	600	121	
	A113	5,713,364	2/3/98	DeBaryshe et al.	128	664	
	A114	5,730,701	3/24/98	Furukawa et al.	600	127	
	A115	5,733,244	3/31/98	Yasui et al.	600	127	
	A116	5,746,695	5/5/98	Yasui et al.	600	127	
	A117	5,768,333	6/16/98	Abdel-Mottaleb	378	37	
	A118	5,769,792	6/23/98	Palcic et al.	600	477	
	A119	5,795,632	8/18/98	Buchalter	428	35.2	
	A120	5,800,350	9/1/98	Coppleson et al.	600	372	
	A121	5,807,248	9/15/98	Mills	600	322	
	A122	5,813,987	9/29/98	Modell et al.	600	473	
	A123	5,817,015	10/6/98	Adair	600	121	
	A124	5,833,617	11/10/98	Hayashi	600	476	
	A125	5,855,551	1/5/99	Sklandnev et al.	600	372	
	A126	5,860,913	1/19/99	Yamaya et al.	600	127	
	A127	5,865,726	2/2/99	Katsurada et al.	600	127	
	A128	5,876,329	3/2/99	Harhen	600	125	
	A129	6,104,945	8/15/00	Modell et al.	600	473	
	A130	6,119,031	9/12/00	Crowley	600	407	
	A131	6,146,897	11/14/00	Cohenford et al.	436	63	
	A132	6,169,817 B1	1/2/01	Parker et al.	382	131	

RECEIVED  
JUL 24 2003  
TC 2800 MAIL ROOM

EXAMINER

DATE CONSIDERED



FORM PTO - 1449

## INFORMATION DISCLOSURE STATEMENT

ATTORNEY DOCKET NO.: MDS-020

APPLICANT(S): Costa et al.

SERIAL NO.: 09/738,612

FILING DATE: December 15, 2000 GROUP: 2633

## FOREIGN PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
	B1	1 223 092	4/7/86	SU				In English	N
	B2	0 135 134	3/27/85	EP					Y
	B3	0 280 418	8/31/88	EP					Y
	B4	0 335 725	10/4/89	EP					Y
	B5	0 474 264	3/11/92	EP					Y
	B6	0 641 542	3/8/95	EP					Y
	B7	0 689 045 A1	12/27/95	EP					Y
	B8	WO 93/14688	8/5/93	PCT					Y
	B9	WO 94/26168	11/24/94	PCT					Y
	B10	WO 95/04385	2/9/95	PCT					
	B11	WO 97/05473	2/13/97	PCT					Y
	B12	WO 98/30889	2/13/97	PCT					Y
	B13	WO 98/41176	9/24/98	PCT					

RECEIVED  
JUL 24 2003  
TC 2800 MAIL ROOM

EXAMINER

DATE CONSIDERED





<b>FORM PTO - 1449</b>		<b>ATTORNEY DOCKET NO.: MDS-020</b>	
<b>INFORMATION DISCLOSURE STATEMENT</b>		<b>APPLICANT(S): Costa et al.</b>	
		<b>SERIAL NO.: 09/738,612</b>	
		<b>FILING DATE: December 15, 2000      GROUP: 2633</b>	
<b>OTHER ART, JOURNAL ARTICLES, ETC.</b>			
<b>EXAM. INIT.</b>	<b>OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)</b>		
	C1	P. Davidovits et al. "Scanning Laser Microscope for Biological Investigations", Applied Optics, Vol. 10, No. 7, pp. 1615-1619, July 1971.	
	C2	C.J.R. Sheppard et al. "Depth of Field in the Scanning Microscope", Optics Letters, Vol. 3, No. 3, September 1978, pp. 115-117.	
	C3	C.J. Koester, "Scanning Mirror Microscope with Optical Sectioning Characteristics: Applications in Ophthalmology", Applied Optics, Vol. 19, No. 11, June 1980, pp. 1749-1757.	
	C4	T. Wilson., "The Role of the Pinhole in Confocal Imaging Systems", Confocal Microscopy Handbook, pp. 99-113.	
	C5	C. Koester, "Comparison of Optical Sectioning Methods: The Scanning Slit Confocal Microscope", Confocal Microscopy Handbook, pp. 189-194.	
	C6	Jeffrey W. Hall, et al. "Near-Infrared Spectrophotometry: A New Dimension in Clinical Chemistry", Clin. Chem 38/9, 1623-1631 (1992).	
	C7	Kevin T. Schomacker, et al. "Ultraviolet Laser-Induced Fluorescence of Colonic Tissue; Basic Biology and Diagnostic Potential", Lasers in Surgery and Medicine, 12: 63-78, (1992).	
	C8	S. Schwartz, "Real-time laser-scanning Confocal ratio imaging", American Laboratory, pp. 53-62 April 1993.	
	C9	R. Richards-Kortum et al. "Description and Performance of a Fiber-optic Confocal Fluorescence Spectrometer, Applied Spectroscopy, Vol. 48, No. 3 pp. 350-355. (1994).	
	C10	J.M. Schmitt et al. "Interferometric Versus Confocal Techniques for Imaging Microstructures in Turbid Biological Media", Proc. SPIE, 2135 (1994), pp. 1-12.	
	C11	N. Ramanujam et al. "Fluorescence Spectroscopy; A Diagnostic Tool for Cervical Intraepithelial Neoplasia (CIN), Gynecologic Oncology 52, pp. 31-38 (1994).	
	C12	S.G. Anderson, "Confocal Laser Microscopes See A Wider Field of Application", Laser Focus World, pp. 83-86, February 1994.	
	C13	J.M. Schmitt et al. "Confocal Microscopy in Turbid Media", J. Opt. Soc. Am., Vol. 11, pp. 2225-2235, August 1994.	
	C14	N. Ramanujam et al. "In vivo diagnosis of cervical intraepithelial neoplasia using 337-nm-excited laser-induced fluorescence", Pro. Natl. Acad. Sci. USA, Vol. 91, pp. 10193-10197, October 1994.	

2190624

EXAMINER

DATE CONSIDERED